

Fig.1

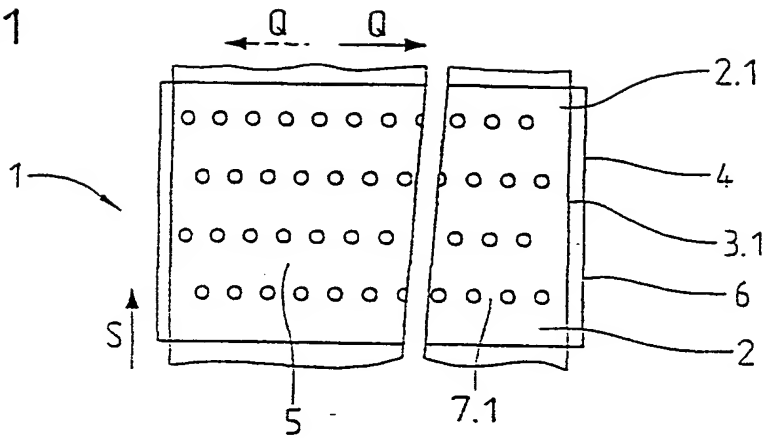


Fig. 2a

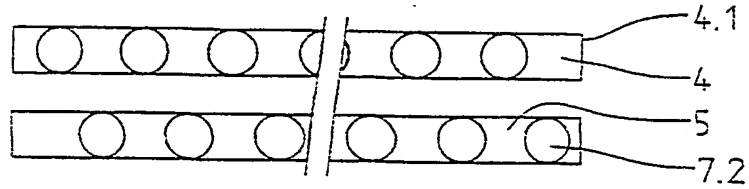


Fig. 2b

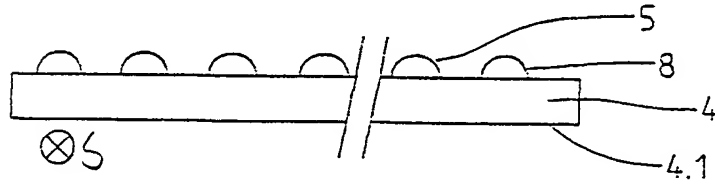


Fig. 3a

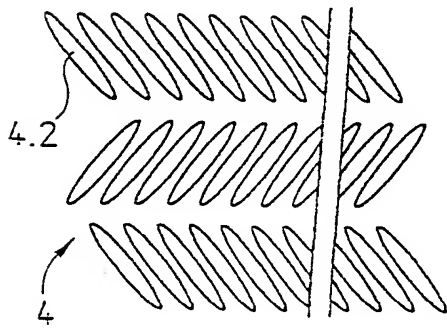


Fig. 3b

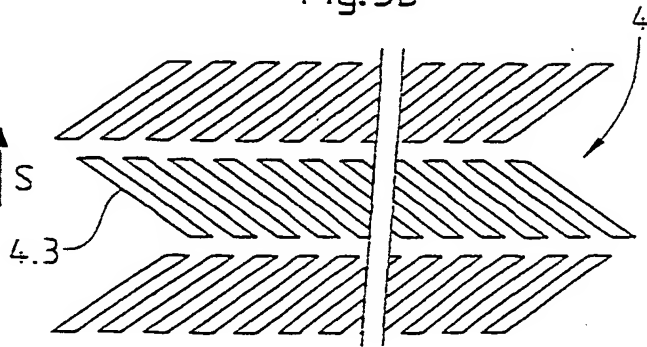


Fig. 3c

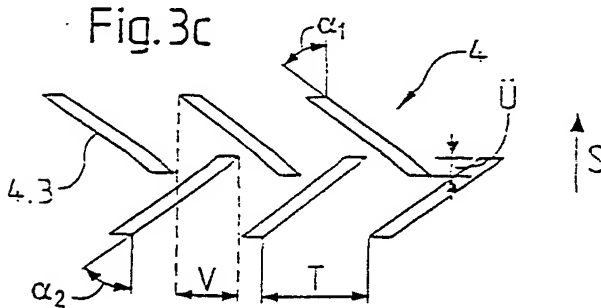


Fig. 3d

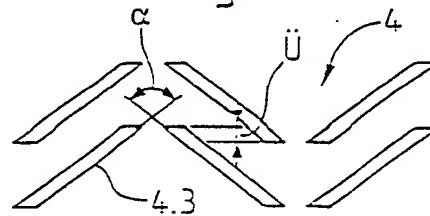


Fig. 4a

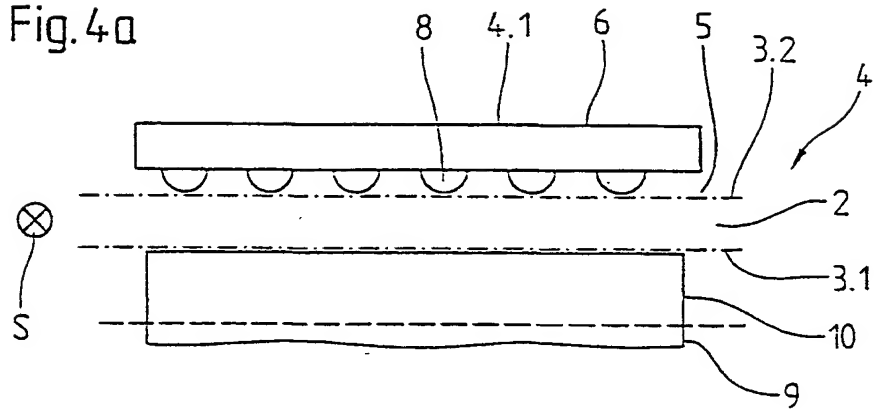


Fig. 4b

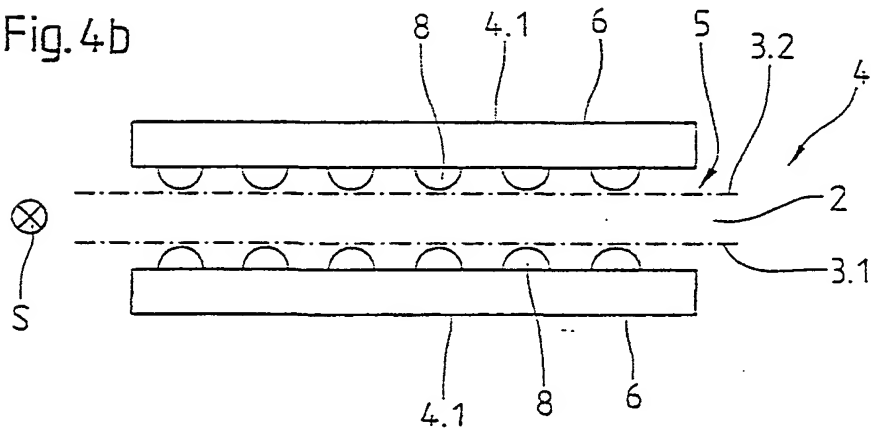


Fig. 4c

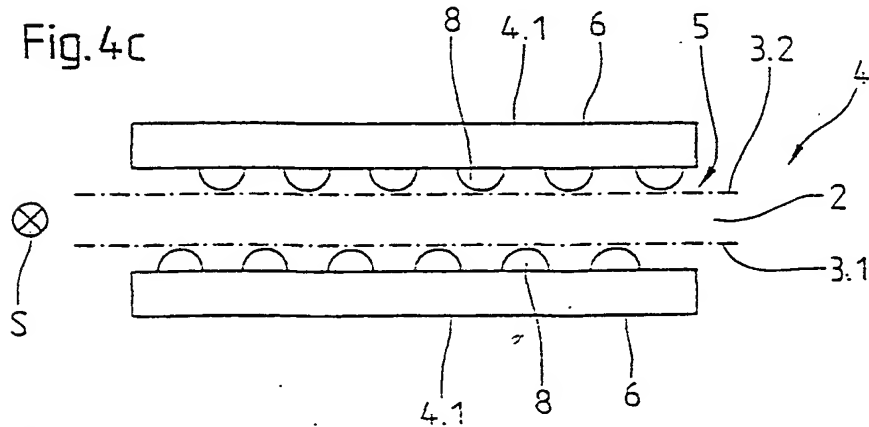


Fig. 5

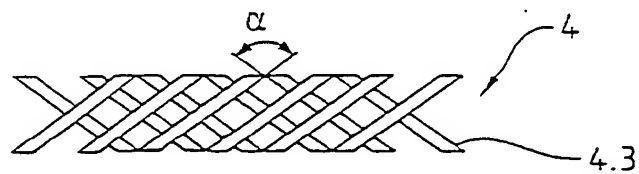


Fig.6

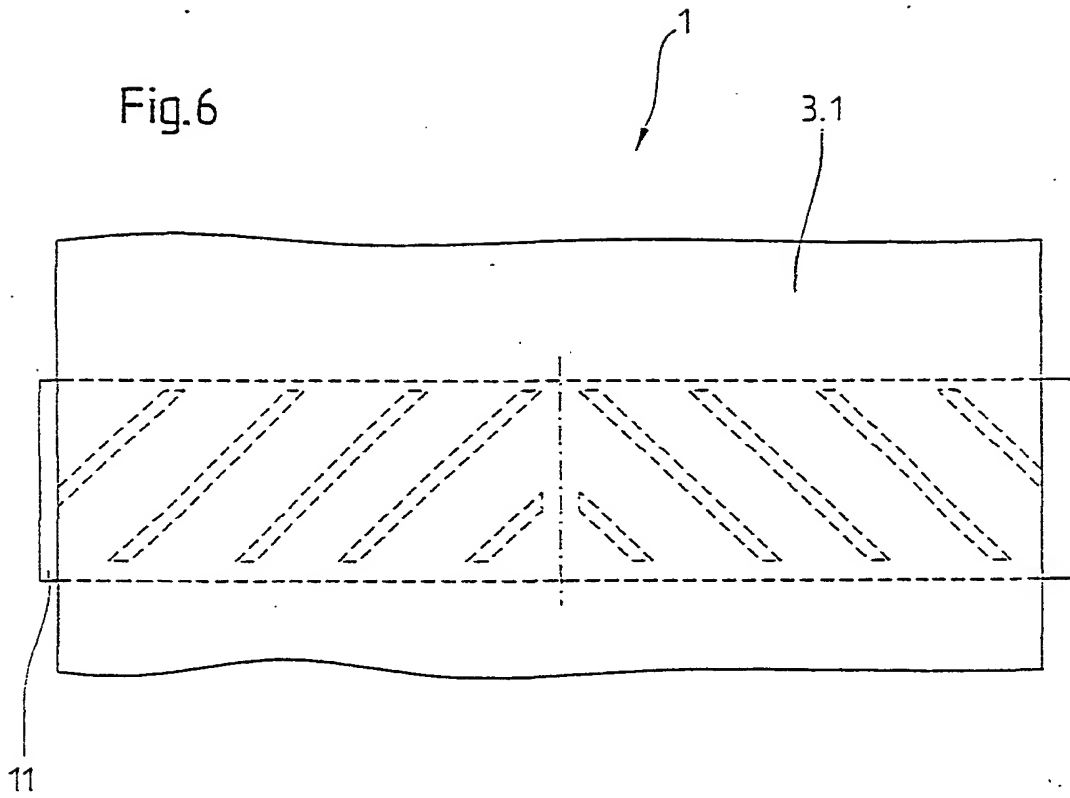


Fig.7

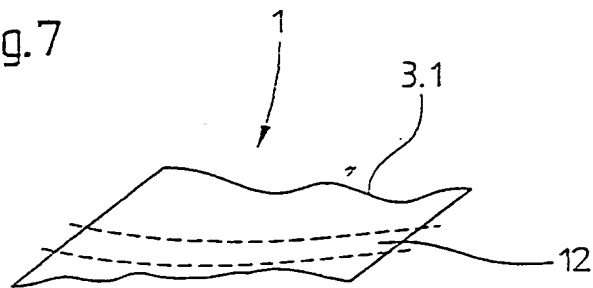


Fig. 8

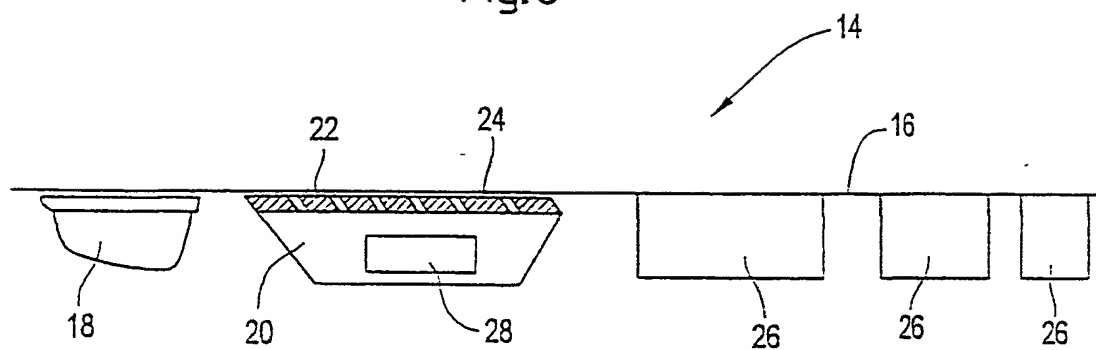
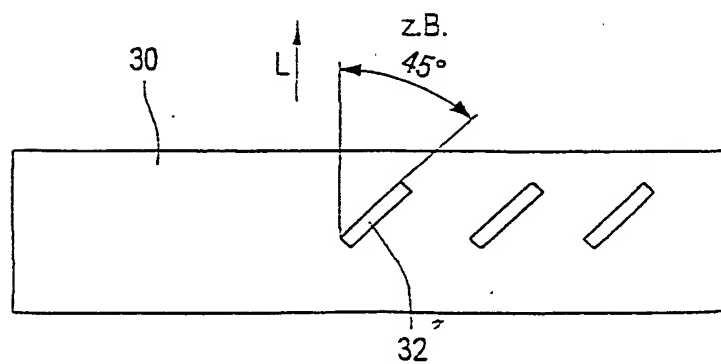


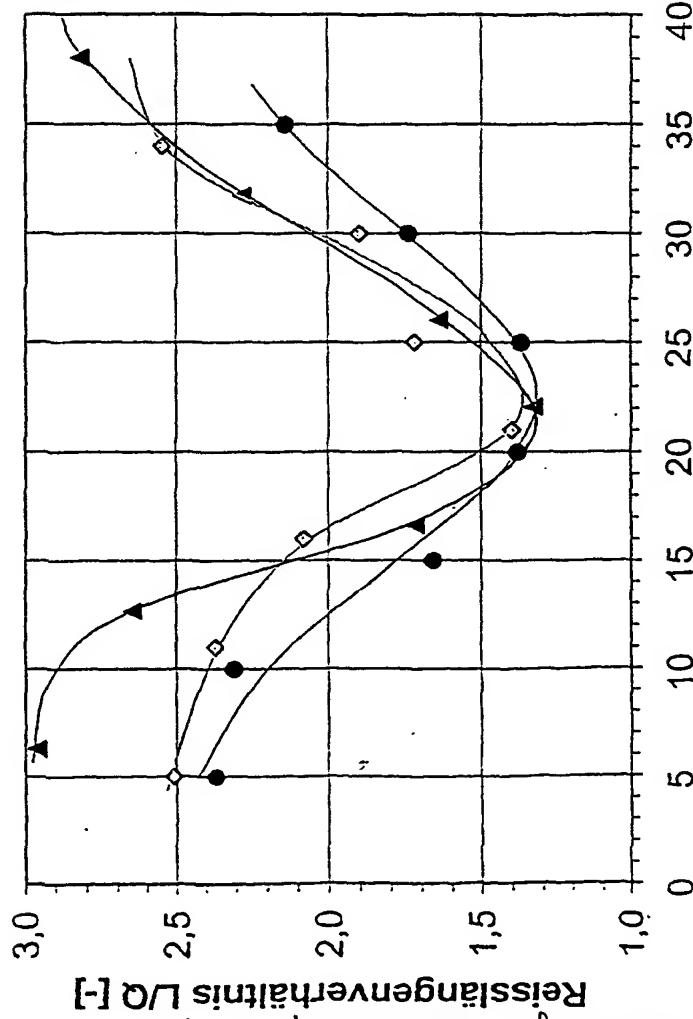
Fig. 9



Suction box w/diagonally slotted plate
 Tensile stiffness relationship longitudinal/transverse with and w/o vacuum

Schrägschlitzplattensauger Festigkeitsverhältnis längs/quer mit und ohne Vakuum

Tear length relationship Longitudinal/Transverse



Speed: 800 m/min.
 Geschwindigkeit: 800 m/min
 FbM: 55 g/m²

Rohstoff: LF (KEMI: UBKP+30%Broke)

Raw material:

- RL L/Q, SSPS mit Vakuum - with vacuum
- ◇ RL L/Q, SSPS ohne Vakuum - without vacuum
- ▲ RL L/Q, Folienkasten mit Vakuum Foilbox with vacuum

RL: Tear length

L/Q: Longitudinal/transverse

SSPS, suction box w/diagonally slotted plate

Fig. 10

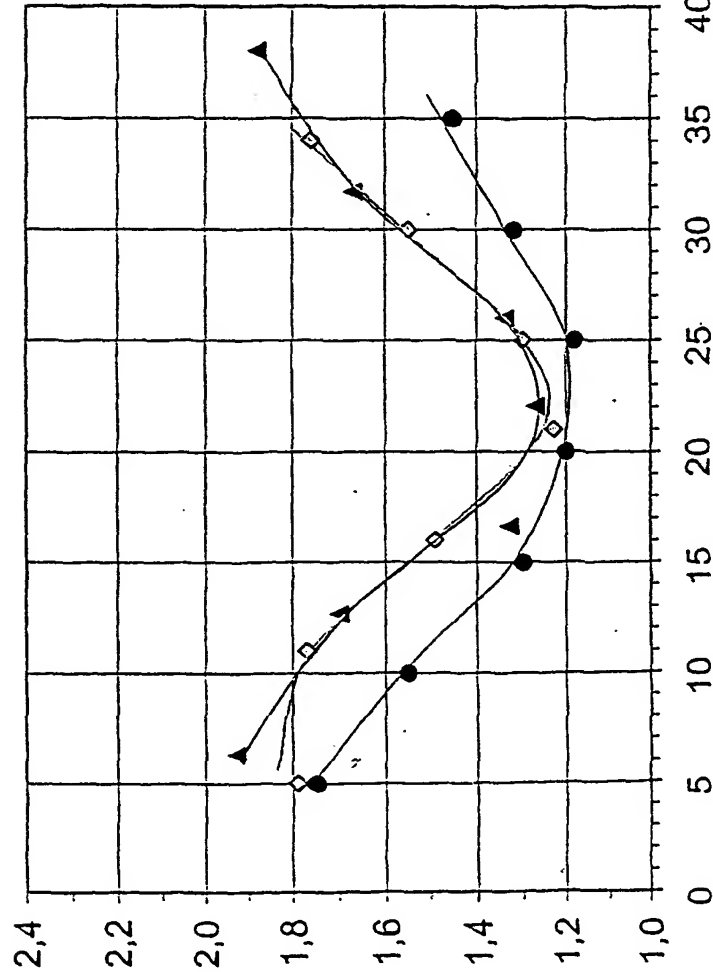
TSI (tensile stiffness index) relationship longitudinal/transverse [-]

Suction box w/diagonally slotted plate
Tensile stiffness relationship longitudinal/transverse with and w/o vacuum

Schrägschlitzplattensauger

Festigkeitsverhältnis längs/quer mit und ohne

Vakuum



Speed: 800 m/min
Geschwindigkeit: 800 m/min
FbM: 55 g/m²
Rohstoff: LF (KEMI): UBKP+30%Broke)
raw material:

- TSI L/Q, SSPS mit Vakuum with vacuum
- ◇ TSI L/Q, SSPS ohne Vakuum without vacuum
- ▲ TSI L/Q, Foilkasten mit Vakuum



TSI = tensile stiffness index

L/Q = longitudinal/transverse

SSPS = suction box w/diagonally slotted plate

Fig. 11

Geschwindigkeitsdifferenz $V_{Strahl} - V_{Sleb}$ [m/min]

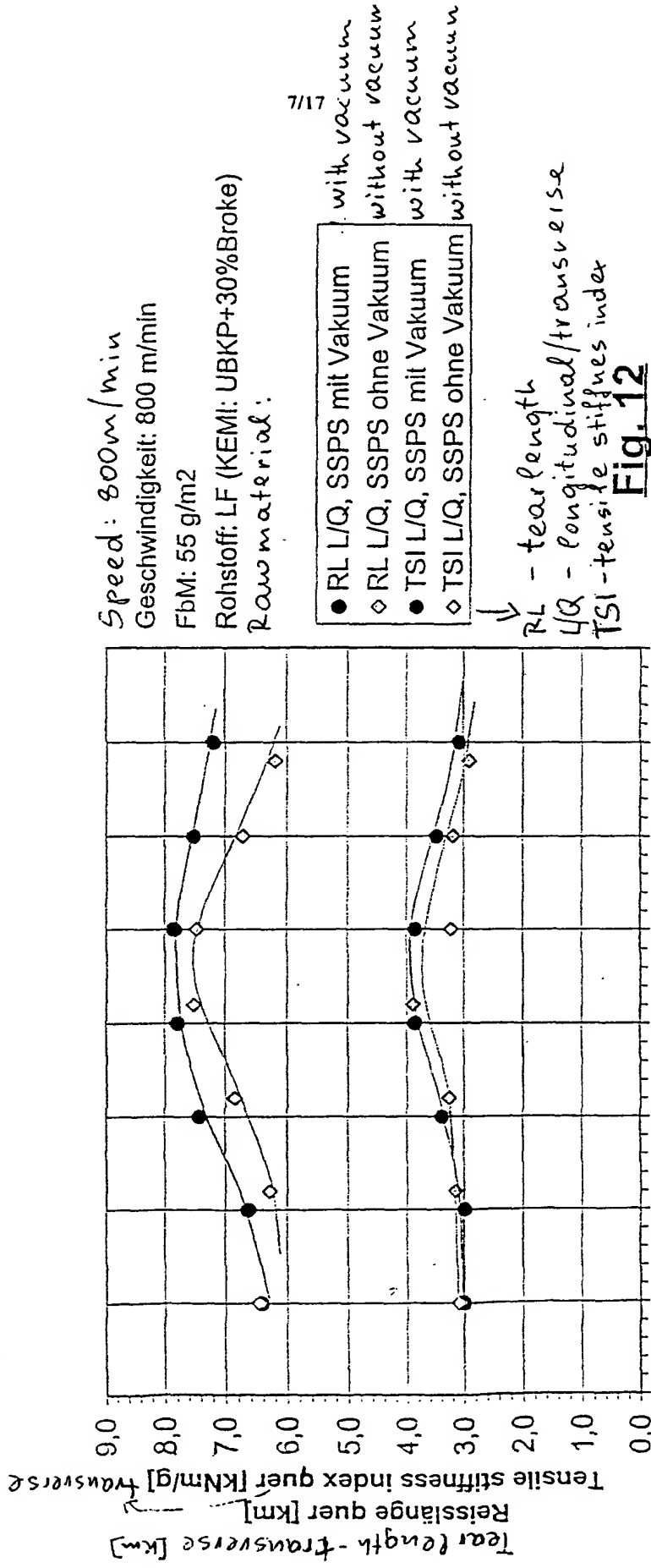
Speed differential $V_{jet} - V_{wire}$ [m/min]

Suction box w/diagonally slotted plate

Transverse strength with and without vacuum on the diagonally slotted plate suction box.

Schrägschlitzplattensauger

Querfestigkeit mit und ohne Vakuum am SSP-Sauger



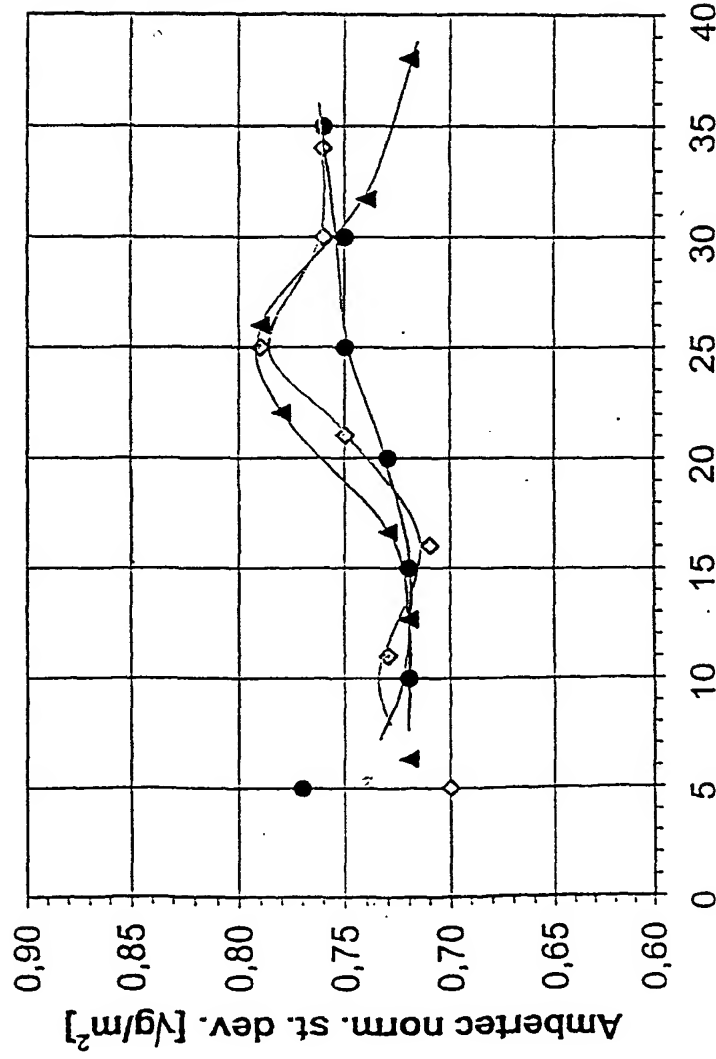
SSPS-Suction box w/diagonally slotted plate

Geschwindigkeitsdifferenz $V_{\text{stahl}} - V_{\text{stieb}}$ [m/min]

Speed differential $V_{\text{jet}} - V_{\text{wire}}$ [m/min]

Suction box w/diagonally slotted plate
Formation with and without vacuum

Schrägschlitzplattensauger Formation mit und ohne Vakuum



Geschwindigkeitsdifferenz $V_{\text{strahl}} - V_{\text{stieb}}$ [m/min]
Speed differential $V_{\text{jet}} - V_{\text{wire}}$ [m/min]

Speed: 300 m/min
Geschwindigkeit: 800 m/min
FbM: 55 g/m²

Rohstoff: LF (KEMI: UBKP+30%Broke)

Rawmaterial:

- RL L/Q, SSPS mit Vakuum
- ◇ RL L/Q, SSPS ohne Vakuum
- ▲ RL L/Q, Foilkasten mit Vakuum

8/17 with vacuum
without vacuum
Foibox with vacuum

RL - tear length

L/Q - longitudinal/transverse

SSPS - Suction box w/diagonally slotted plate

Fig. 13

Suction box w/diagonally slotted plate
Tensile stiffness orientation with and without vacuum

Schrägschlitzplattensauger Festigkeitsorientierung mit und ohne Vakuum

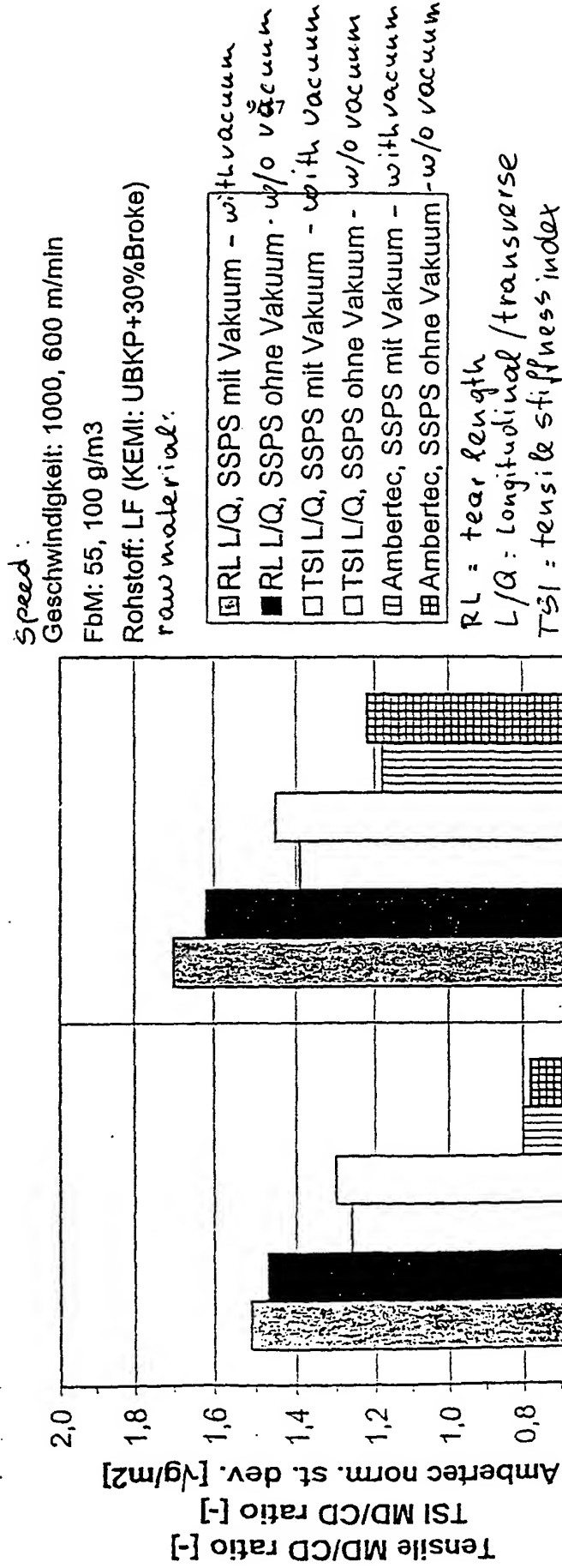


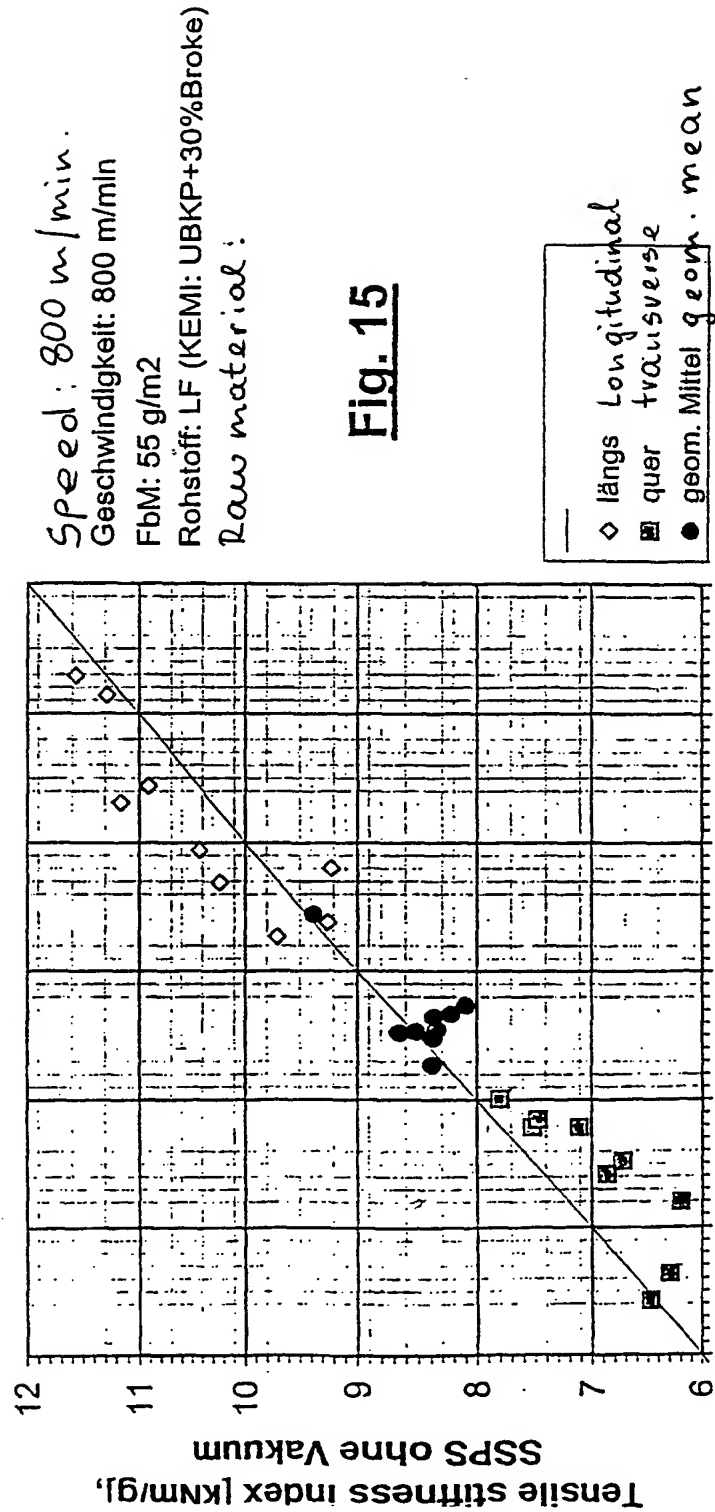
Fig. 14

SSPS = Suction box w/diagonally
slotted plate

1000 m/min, 55 g/m² 600 m/min, 100 g/m²
Geschwindigkeitsdifferenz $V_{\text{Strahl}} - V_{\text{Sleib}}$ [m/min]
Speed differential $V_{\text{jet}} - V_{\text{wire}}$ [m/min]

Suctionbox w/diagonally slotted plate
Tensile stiffness index with/without vacuum on suction box

Schrägschlitzplattensauger TSl mit / ohne Vakuum am SSP-Sauger



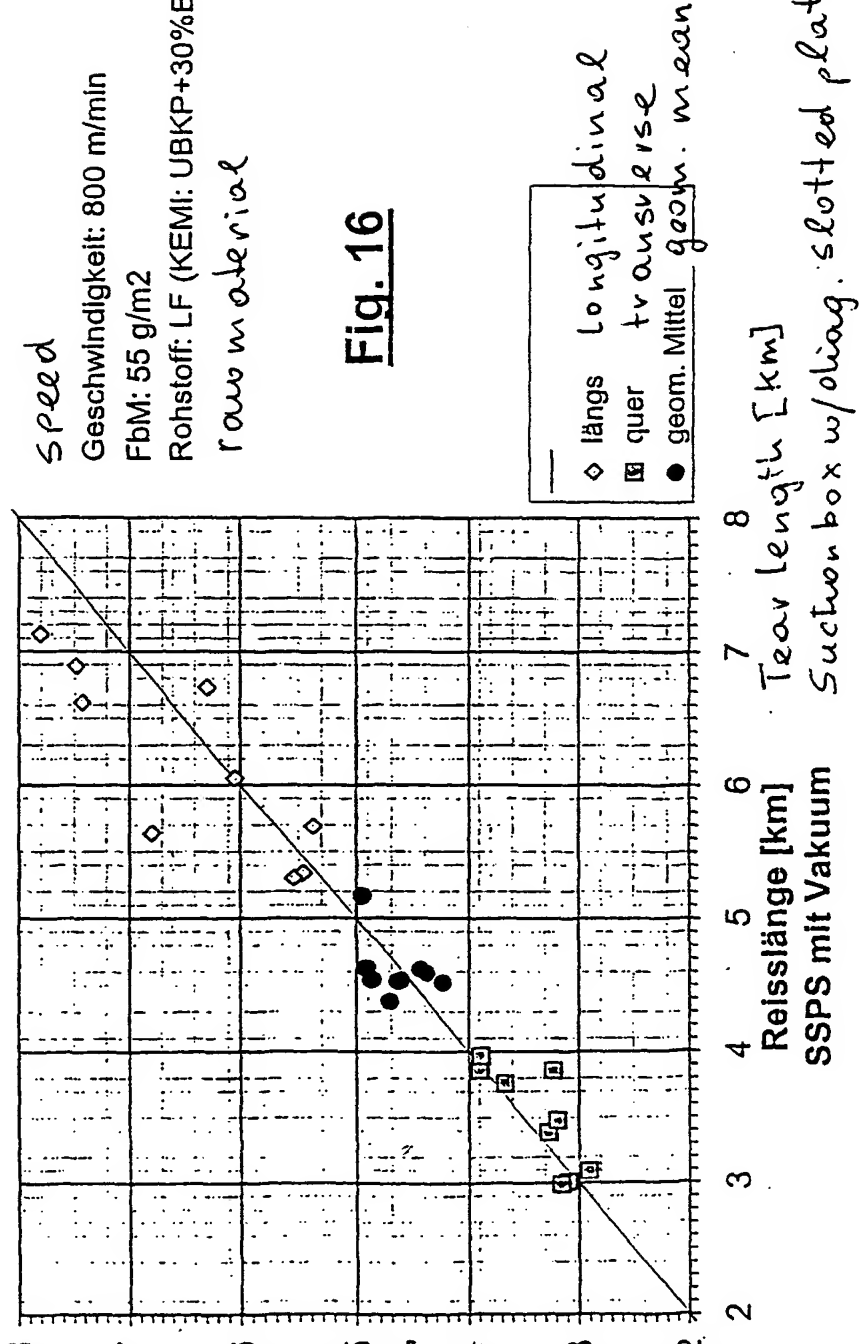
Suctionbox w/diagonally slotted plate with vacuum

Suction box w/diagonally slotted plate
 Tear length with/without vacuum at the suction box w/diag.slotted plate

Schrägschlitzplattensauger Reißlänge mit / ohne Vakuum am SSP-Sauger

Speed
 Geschwindigkeit: 800 m/min
 FbM: 55 g/m²
 Rohstoff: LF (KEMI: UBKP+30%Broke)
 raw material

Fig. 16



Suction box w/diagonally slotted plate
Tensile stiffness orientation with and without vacuum

Schrägschlitzplattensauger Festigkeitsorientierung mit und ohne Vakuum

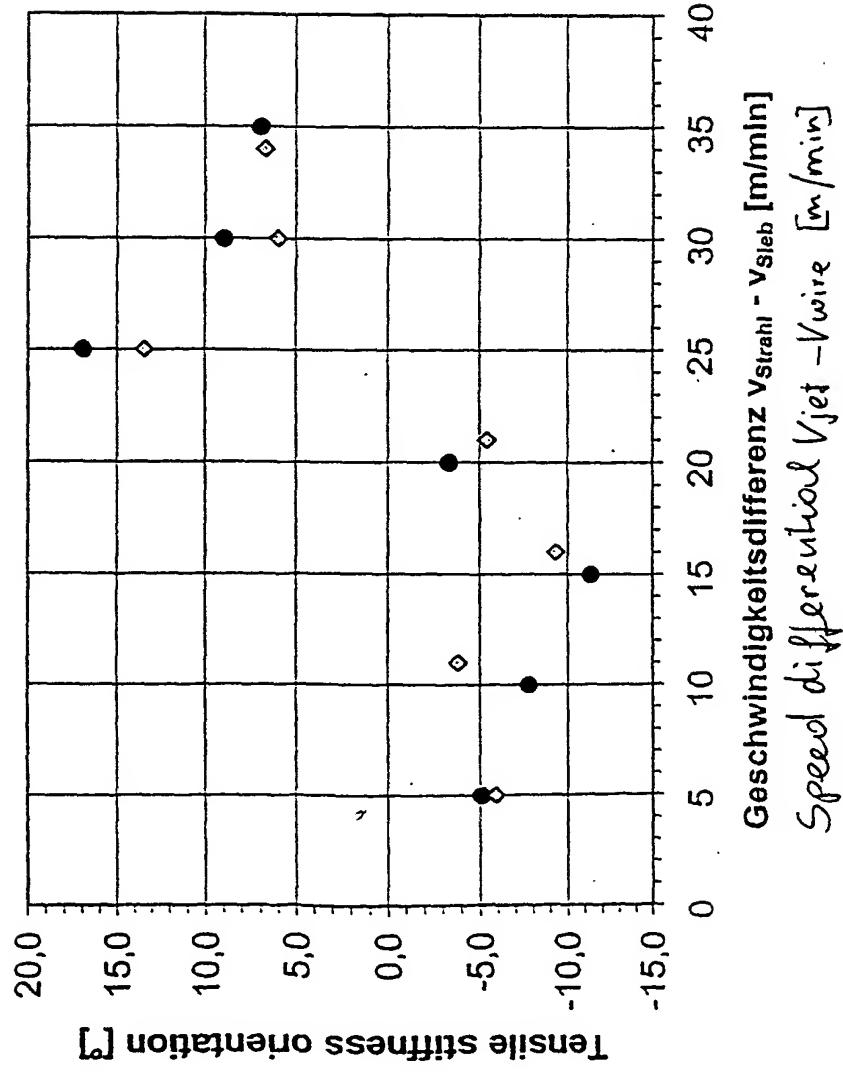


Fig. 17

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● RL L/Q, SSPS mit Vakuum - with vacuum
◇ RL L/Q, SSPS ohne Vakuum w/o vacuum

RL = Tear length

L/Q = Longitudinal/Transverse

SSPS: Suction box w/diagonally slotted plate

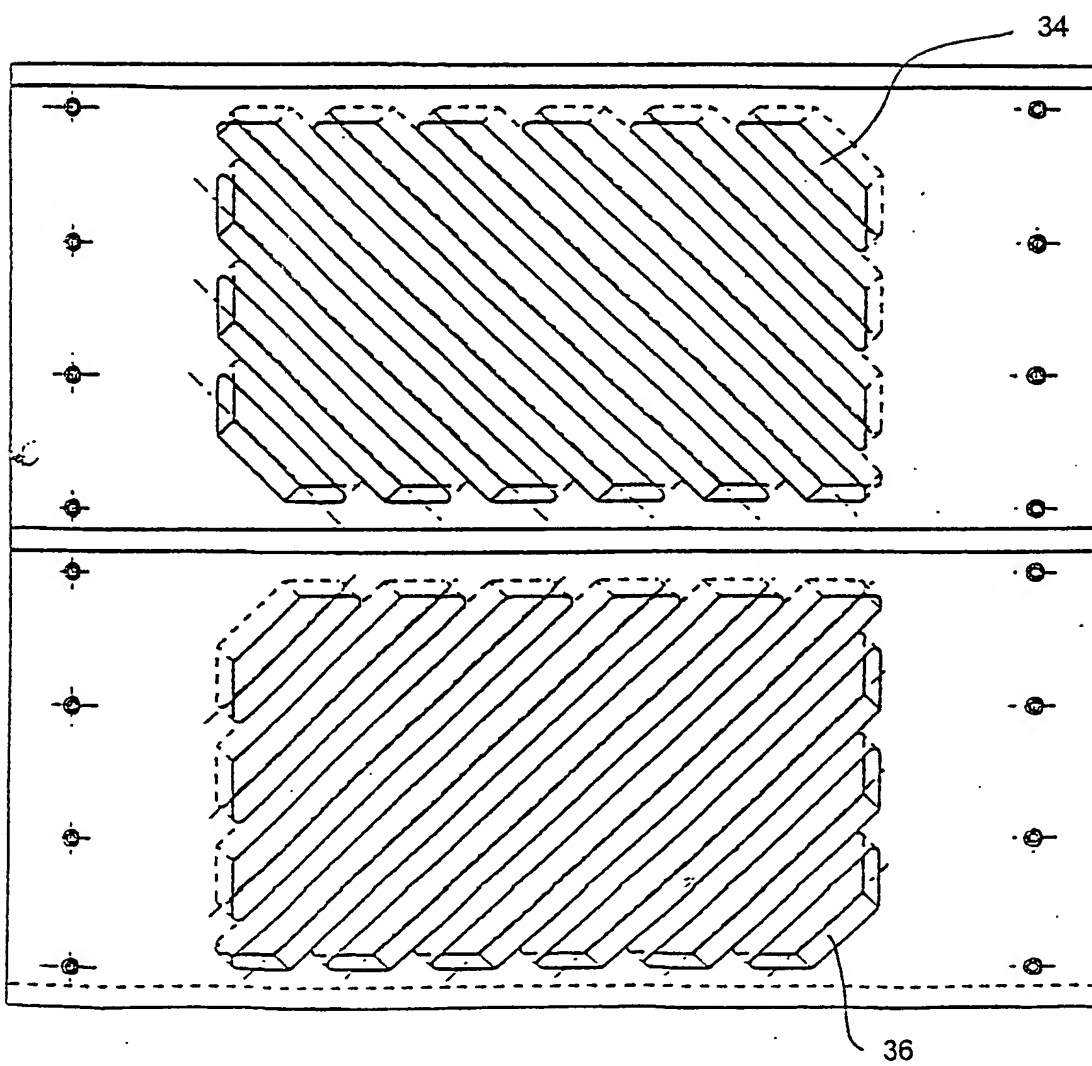
Fig. 18

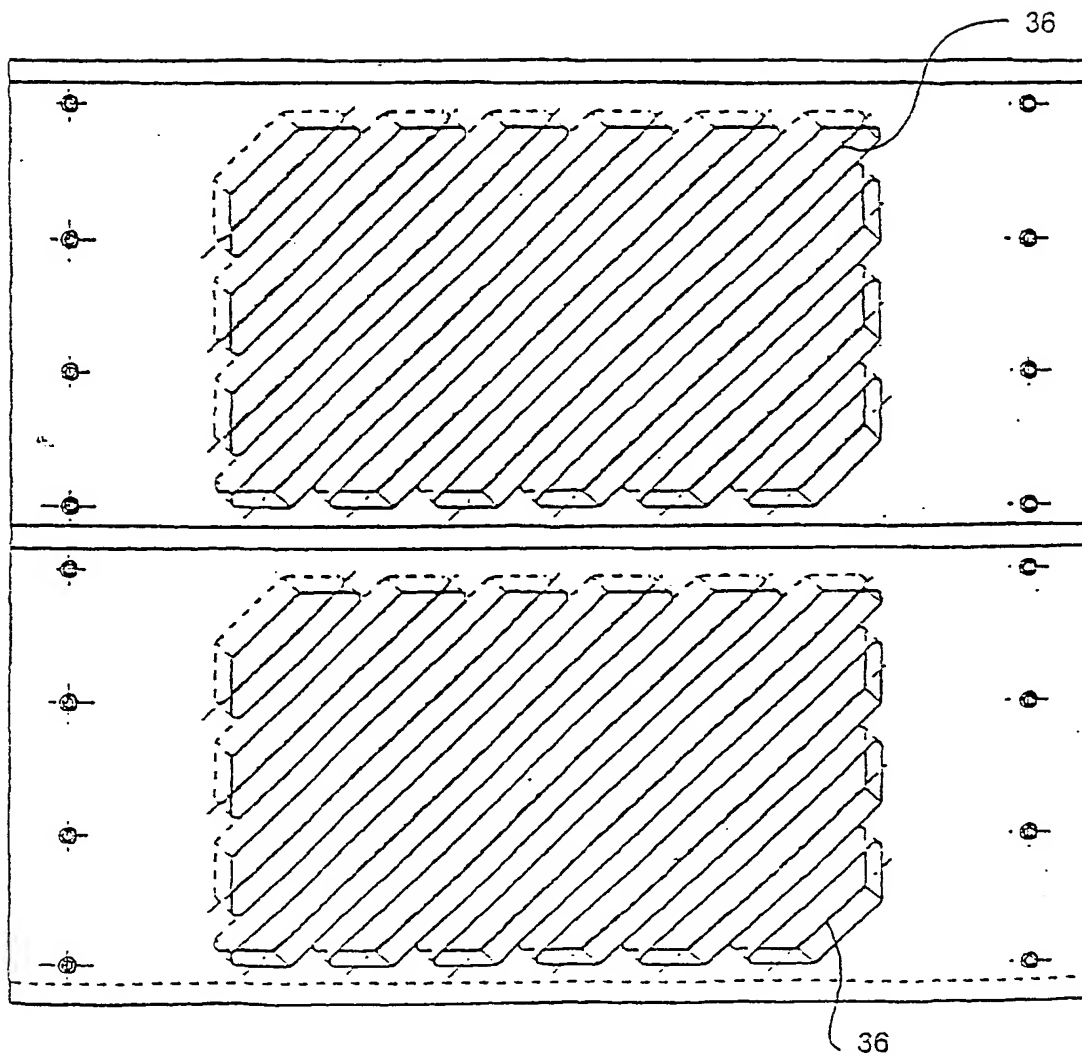
Fig. 19

Fig. 20

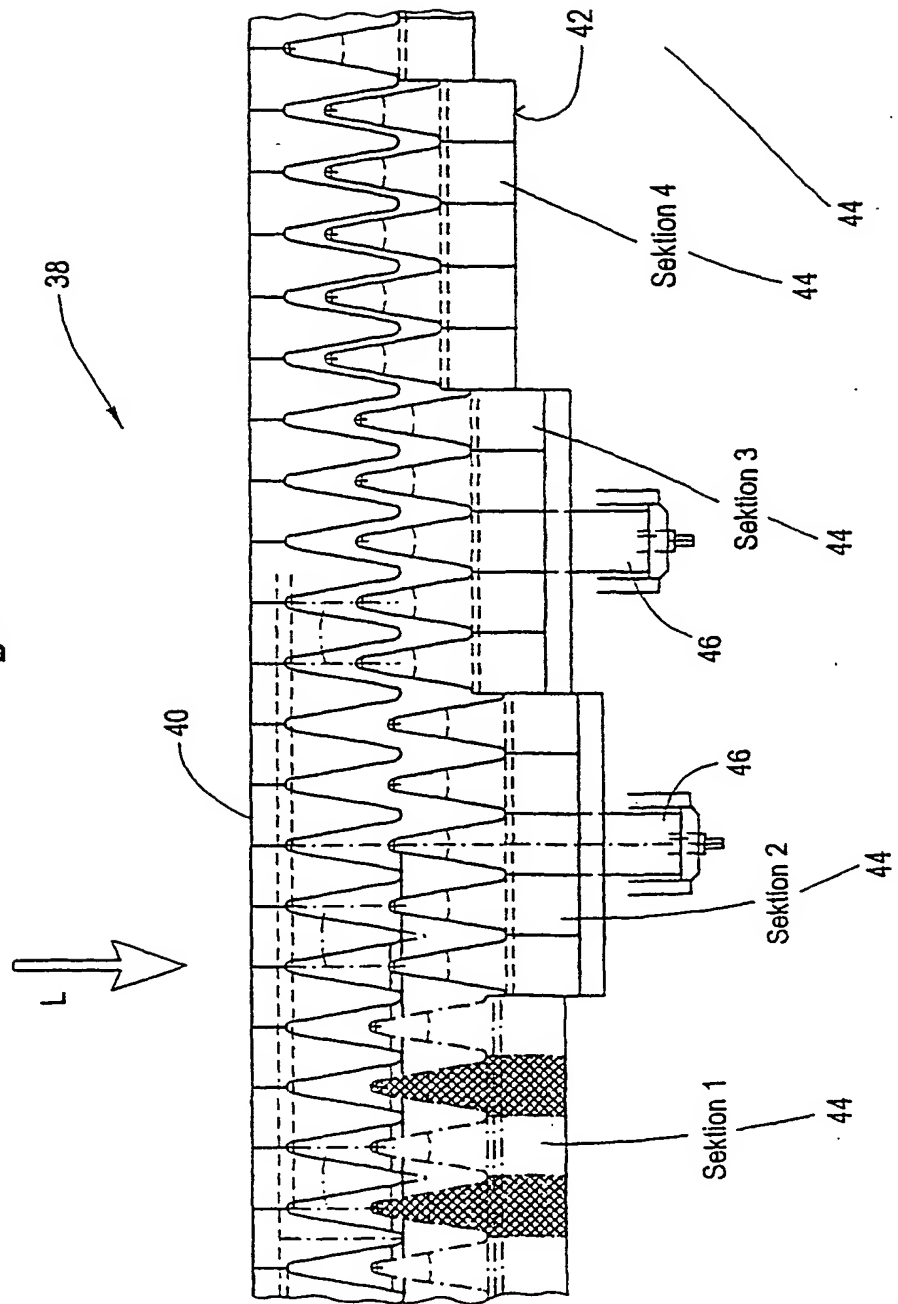


Fig. 21

